



Section for typical Washington Avenue by Montgomery Meigs, c. 1875



New Hampshire Avenue NW with trees planted approximately 20 feet on center



Shaded sidewalk near the southeast corner of the U.S. Capitol Grounds

## Urban Design Characteristics for South Capitol Street West of the Anacostia River

- A continuous, at-grade 130-foot street section as originally specified in the L'Enfant Plan with a narrow median, and generous sidewalks
- Several at-grade intersections with traffic signals provide optimal connection and safe travel to and from adjoining cross streets
- Six lanes of moving traffic that maintain current corridor capacity, particularly during peak periods
- On-street parking during off-peak times to buffer sidewalks from moving traffic and to serve businesses along the corridor
- User-friendly signs/direction to nearby transit: buses, light rail, and Metro
- Bicycle pathways and/or lanes, either on South Capitol Street or on a street to the east or west
- Double rows of mighty trees with broad canopies to beautify the street, provide shade, and connect the street to parks and the Anacostia Riverwalk
- Street furniture—such as benches, waste baskets, and bicycle racks--of the highest quality

Establishing South Capitol's 130-foot street section establishes the primary dimension from which other design decisions can be made. NCPC's *South Capitol Street Urban Design Study* defined three right-of-way possibilities. This study also considered these options.

After careful analysis and consideration, this study has selected 130 feet as South Capitol Street's optimal street section because it fulfilled the greatest number of transportation and urban design objectives. This dimension restores the street's original spatial character and reinforces the axial relationship with the Capitol Dome. Adherence to this dimension, which was originally specified by L'Enfant Plan is also the most historically appropriate. All three NCPC scenarios could accommodate this street section.

Montgomery Meigs' section for a typical Washington avenue illustrates the conceptual framework that makes streets into glorious outdoor rooms. Two rows of trees on each side spaced as close as 20 feet on center creates the dense green canopy that provides shade, calms traffic, and improves air quality.

Of the three options considered, the 130 foot street section balances multimodal traffic most effectively. Six lanes of vehicular traffic maintain South Capitol's current capacity but also allow pedestrians and cyclists to cross the street at signalized intersections with ease.

This carefully crafted framework creates an inviting physical environment. Washington is filled with streets built according to these dimensions, and they are among Washington's most beautiful and cherished public places.



East Capitol Street looking west toward the U.S. Capitol Dome



Louisiana Avenue NW looking toward Union Station



Reestablishing South Capitol Street's identity as a significant gateway to the nation's capital requires removing the Southeast Freeway. Virginia and Massachusetts Avenues—named after the most prominent of the original thirteen colonies—are the only two thoroughfares in Washington that extend through three of its four quadrants. While Massachusetts Avenue has largely retained its original configuration, Virginia Avenue was obscured over a century ago when train tracks were built along its alignment. The freeway constructed a hundred years later followed the same right-of-way. Today, aside from a few blocks in the city's northwest quadrant, Virginia Avenue exists only in fragments, largely as frontage roads to I-395.

The Southeast Freeway's removal and the subsequent restoration of Virginia Avenue in southeast can be made possible by constructing a tunnel to carry regional through traffic beneath the South Capitol Street corridor. Replacing the 300-foot wide highway with Virginia Avenue's original 160-foot right-of-way creates new opportunities for public spaces and private development. The restoration of Virginia Avenue will accomplish far more than restoring the view of the Capitol Dome; it will capture the value of the land currently consumed by highway infrastructure.

Virginia Avenue is one of several locations considered for roundabouts along South Capitol Street. Although it looks like Washington's other traffic circles, the roundabout can safely handle South Capitol Street's existing traffic volumes. According to the report *Roundabouts: An Informational Guide* published by the U.S. Department of Transportation, roundabouts can safely handle existing high traffic volumes.

# Virginia Avenue



Virginia Avenue and a proposed roundabout at the intersection of South Capitol Street

Although roundabouts do not have signalized intersections like most of Washington's circles, they have the potential to become magnets of urban activity at any hour of the day or night, Washington's best circles attract urban activity that gives each place a life of its own. While a roundabout handles traffic differently than a traditional Washington circle, it can be visually consistent with the city's other circles.



Aerial view of Dupont Circle looking east up P Street NW



Dupont Circle looking northwest from Connecticut Avenue NW



Dupont Circle: a magnet of urban activity





### Van Street SE

This street, which has a 50-foot right-of-way, is typical of the thoroughfares in L'Enfant's perpendicular grid. Its current disconnection from the street network is typical of the side streets throughout the South Capitol Street corridor. As the *South Capitol Street Urban Design Study* demonstrates, the blocks between South Capitol and Van Streets provide numerous opportunities for parks and squares. It would also create even more places for future monuments and memorials within the study area than the eight sites defined by NCPC's *Monuments and Museums Master Plan* within the study area.

### Half Street SE

Half Street is one thoroughfare east of South Capitol Street that could accommodate a transit line. The District Department of Transportation has recently begun an Alternatives Analysis and Environmental Study that will determine the most appropriate alignment for light rail or any other form of rail transit along the corridor and throughout the city.

Although dedicated transit lanes were considered for South Capitol Street, including them and maintaining current vehicular capacity would have required the street to be widened significantly. This would make South Capitol more difficult to use for pedestrians and bicyclists. The increased width would also make the street more like a roadway, which would divide rather than unify local neighborhoods.

## Van Street SE / Half Street SE / New Jersey Avenue SE



Perspective of Half Street SE with dedicated transit lanes

Half Street's 80-foot right-of-way can accommodate two dedicated light rail lanes, two vehicular lanes, and possibly two bicycle lanes. It is an ideal location for a transit center because of its proximity to the Navy Yard Metrorail station and local bus lines, which would allow passengers to transfer among buses, light rail, and Metrorail.

### New Jersey Avenue SE

The removal of the Southeast Freeway benefits New Jersey Avenue by reestablishing its vista to the Capitol Dome. The integration of the vibrant neighborhood north of the freeway and the distressed area south of it will encourage economic development from K to M Streets SE. This will have the added benefit of reconnecting the Navy Yard and adjacent neighborhoods to Capitol Hill, areas in southeast Washington currently severed by the interstate highway.



John Paul Jones Memorial on a small triangular green space southwest of the Washington Monument



Proposed improvements to the intersection of M and South Capitol Streets include reconfiguring the underpass arrangement into a signalized, at-grade intersection. This is essential to reestablishing South Capitol Street's identity as an urban boulevard. It will also provide a more dignified setting for the St. Vincent de Paul Church, one of the corridor's historic and cultural resources.

Properly synchronized traffic signals on South Capitol Street can handle the existing traffic volumes. Their traffic calming effect also makes the street network safer for all transportation modes. The new at-grade street network ultimately will allow a greater accessibility and diversity of turning opportunities when compared to South Capitol Street's current arterial configuration. The projected through traffic growth would be diverted to the tunnel.

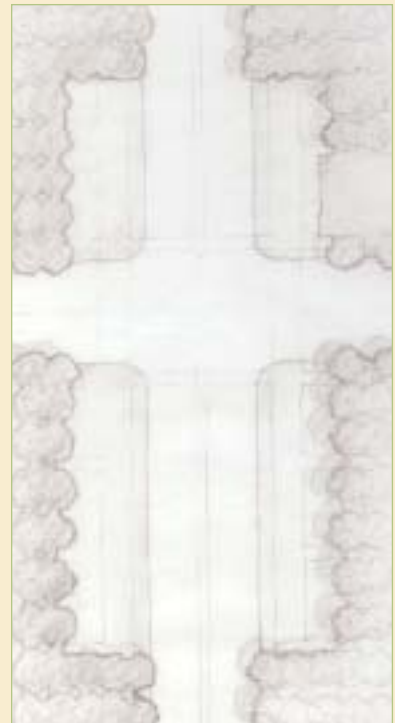


# Intersection of M and South Capitol Streets

---



Perspective of M and South Capitol Streets looking northeast



Plan of at-grade intersection of M and South Capitol Streets





Potomac Avenue (initially named Georgia Avenue) originally ran from southwest Washington to Congressional Cemetery along the west bank of the Anacostia River. Regretably, it never became a grand L'Enfant promenade. Its interruption by the Navy Yard and its discontinuation west of South Capitol Street have left only fragments of the original avenue in tact.

The proposed improvements to Potomac Avenue include the extension to 2nd Street SE to the east and to Fort McNair to the west. Introducing a proper urban street into an area where none exists will spur economic development along the avenue's entire length, one of the Anacostia Waterfront Initiative's objectives for this area.

A proposed circle for the intersection of Potomac Avenue and South Capitol Street creates a public place that will attract visitors and provide a grand setting for a future monument or memorial. Its 400-foot diameter, the same as that of Virginia Avenue, provides continuity along South Capitol Street and coincides with other District circles in scale and form.

East of the Anacostia River, the local street system needs to be better integrated and separated from the arterial system. The interstate infrastructure should be confined to I-295 and its interchange with the Suitland Parkway. This will have the benefit of reinstating South Capitol Street's urban identity. The park-like character of Suitland Parkway should be extended north of the I-295 interchange through Poplar Point and to the new bridge. This work would be fully integrated with improvements at Poplar Point and the Anacostia Riverwalk, which will be fully developed in subsequent studies.

# Potomac Avenue SE & SW / Improvements at Suitland Parkway and Martin Luther King Jr. Boulevard

---



Perspective of roundabout at the intersection of Potomac Avenue and South Capitol Street looking southwest



---

Constructing a tunnel, which will carry through traffic, will alleviate congestion on South Capitol Street. This will be essential for South Capitol Street's transformation into the centerpiece of a pleasant and livable neighborhood. The tunnel will alleviate the burden of commuter traffic on the entire street network. Including a tunnel in the study area's improvements is the only scenario that permits the added benefit of removing the Southeast Freeway.

The tunnel portals are a critical part of the study area's urban design considerations and can be configured in many different ways. East of the river, their design must respect the Poplar Point parkland and Anacostia's historic neighborhoods. The north end of the tunnel, which connects to I-395 and the center leg tunnel, must be linked with the existing interstate system without adversely impacting the area southwest of the U.S. Capitol grounds.



# The Tunnel

---

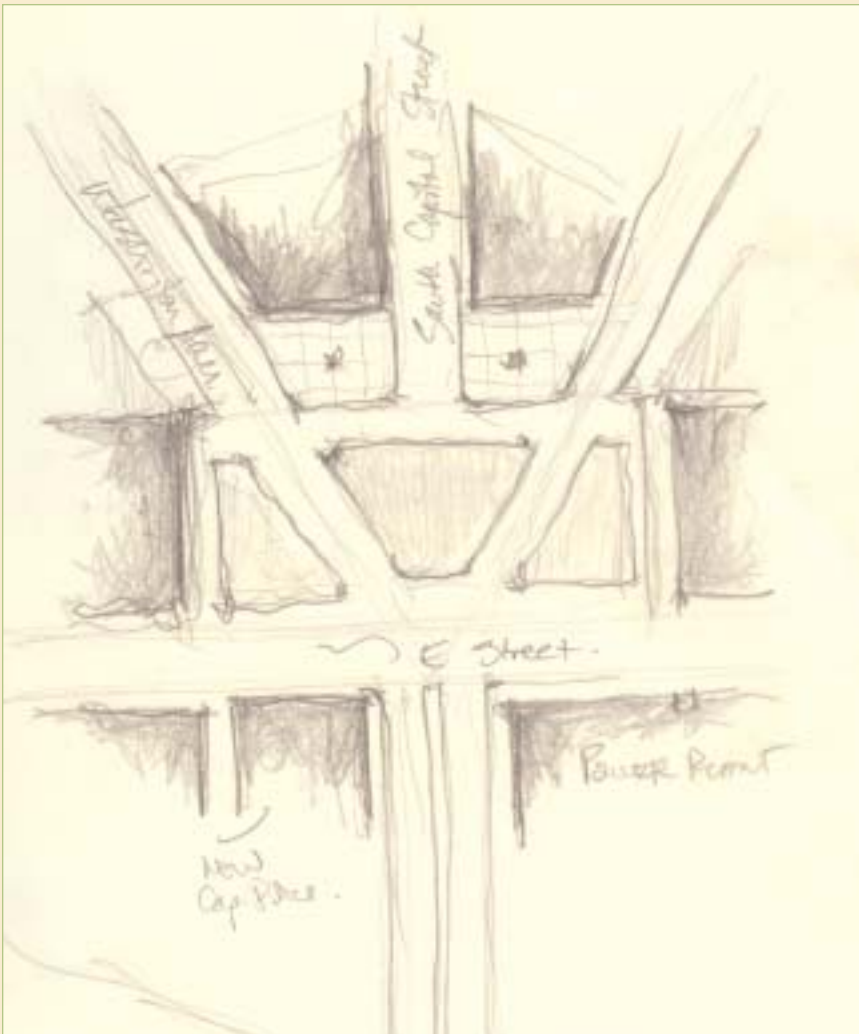


Sketch of a tunnel portal on the east/west side of the Anacostia River

## Conclusion

Urban design is a complex interplay among large outdoor spaces—parks, circles, and squares—with small yet essential architectural details. Every element in the urban landscape, from the light fixtures and trash cans to the alignment and grading of streets—effects the entire environment. Each piece is absolutely dependent on the other for a city's streets and public spaces to be both inviting and functional.

The urban design elements proposed for the South Capitol Street corridor continue the grand traditions of the L'Enfant Plan and the McMillan Commission while also accommodating multimodal traffic safely and efficiently. The best urban places are as beautiful when filled with people as they are absent of visitors. The key to this success is that the space is not empty, but rather shaped by physical elements that welcome all forms of civil activity.



Conceptual sketch of the intersection at South Capitol Street and Washington and Delaware Avenues SW



